A NEW SPECIES OF *ACTINOPTERA* RONDANI TOGETHER WITH DISTRIBUTIONAL RECORDS OF OTHER FRUIT FLIES (DIPTERA: TEPHRITIDAE) FROM INDIA[1]

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ABSTRACT: A new species of fruit fly, *Actinoptera carignaniensis* is described. Distributions in India for the fruit flies – *Trupanea amoena* (Frauenfeld), *Pliomelaena zonogastra* (Bezzi), *Dioxyna sororcula* (Wiedemann), *Platensina acrostacta* (Wiedemann) and *Seedella spiloptera* (Bezzi) are provided.

DESCRIPTORS: *Actinoptera carignaniensis* sp. nov., other tephritines, India.

During a recent survey of the fruit fly fauna of the Simla Hills (Himachal Pradesh) an interesting new species of the genus *Actinoptera* Rondani was collected. 25 species of this genus are distributed in Africa and Europe and 12 (including the new one) in the Orient. In India, only two species have been known prior to the present new one. This new description is followed by a listing of the various fruit flies of the subfamily Tephritinae now recorded from various parts of India.

Actinoptera carignaniensis, sp. nov.

(Figs. 1-3)

Male: Small; brownish-yellow. Head (fig. 1) brownish-yellow, broader than long; frons broader, brown, yellow on eye margins; face and antennae yellowish-brown; arista short, pubescent. 2nd antennal segment a little less than half as long as the 3rd and with a black median bristle; 3rd about 2/3rd as wide as long and with a point anteriorly; one pair of upper orbitals and two pairs of lower orbitals; ocellar bristles thin and long, little shorter than outer verticals; outer verticals less than one half the inner verticals; all bristles brownish-yellow except yellow occipitals. Thorax dark grey with blue dust and yellowish-brown bristles; anterior dorso-central bristles just behind the suture. Scutellum with two long bristles. Halters pale. Abdomen (fig. 3) triangular in outline, with blue dust and a number of obliquely placed yellow bristles. Legs brownish-yellow, femora with black tinges posteriorly. Wings much longer than the body, hyaline basally, apically one half dark brown with hyaline spots (fig. 2); costal spine single; stigma short, dark brown; cell r_1 with 2 hyaline spots, the basal one more than twice as long as the apical one; cell r_3 broken with 4 hyaline spots, the long basal ones a little beyond r-m, the anterior apical spot oval, enclosing a small portion of apex of R2+3, about 1/3rd of the posterior apical triangular spot; cell r_5 with 2 large hyaline spots, the basal one a little beyond the base of the 2nd hyaline apot of cell r_3, the apical spot about twice as long as the basal one, irregular in shape, indicating its origin from 3 hyaline spots; cell 2 m_2 with 3 hyaline spots, apical one smallest and basal one largest; cell 1 m_2 broken into 2 large hyaline areas by a light but distinct band; a light brown coloured band starting from the stigma to the hinder margin of the wing but broken in between R_{4+5} and M_{1+2}; cross

[1] Accepted for publication: December 28, 1976

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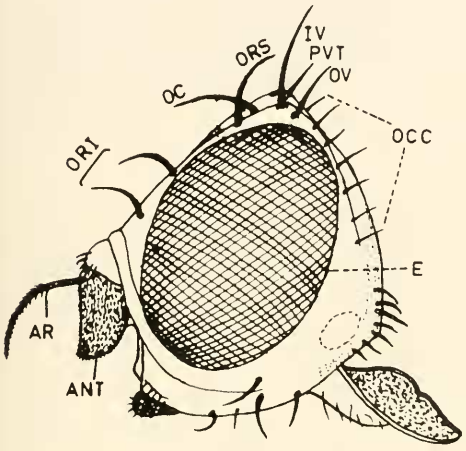
vein r-m and posterior cross veins with little infuscations; r-m situated at about apical one-fourth of the discal cell (cell $1m_2$); cubital cell with a very short point; Cu_2 + 1A ending much before the wing margin. Length: Body-2.00 mm; Wings-2.75 mm.
Female: Unknown.



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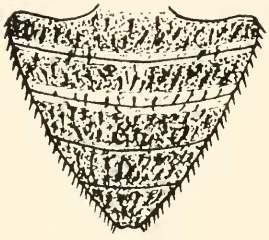

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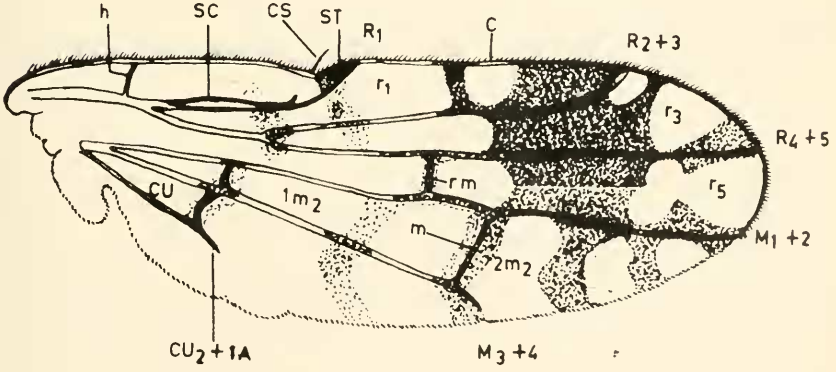

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Actinoptera carignaniensis, nsp.

ANT-Antennae; AR-Arista; C-Costal vein; CS-costal spine; Cu-cubital cell; E-eye; Cu_2 + 1A-2nd cubital vein plus 1st anal vein; h-humeral cross-vein; IV-inner vertical bristles; m-medial cross-vein; M 1+2, M_{3+4}-medial veins; m_2 and m_4-2nd and 4th medial cells; Oc-occellar bristles; Occ-occipital bristles; ORI-Inferior orbital (or lower orbital) bristles; ORS-superior orbital (or upper orbital) bristles; OV-outer vertical bristles; PVT-postvertical bristles; R_1, R_{2+3}, R_{4+5}-Radial veins; r_1, r_3, r_5-radial cells 1, 3 and 5; r-m - radial-medial cross-vein; Sc-subcostal vein; ST-Stigma.

Collection examined: Holotype male, Carignano (Simla, Himachal Pradesh), 18.1X.1976.Coll. J.S. Grewal.

This species is very peculiar in body size and colouration. The wings are narrow and longer than the body. It is very closely related to *Actinoptera tryapaneoides* Shiraki (1968. Smiths. Inst. U.S.N.M. Bull. 263: 88-90) described from Iriomote Islands. The new species can be separated from it by the characters of hyaline spots of the wing, thoracic markings and abdomen without posterior bristles.

Trupanea amoena (Frauenfeld)

Trypeta amoena Frauenfeld, 1865, Akad. Wiss. Wein, 22: 542.
Trupanea amoena (Frauenfeld) Bezzi, 1913, Mem. Indian Mus. 3: 164
Collection examined: 1 female, on wing, Punjab Agricultural University Orchard, Ludhiana, 26.VIII.1976. Coll. J.S. Grewal; 1 male, on wing, R.B.S. College Field, Agra, 15.X.1976.Coll. M.L. Agarwal.

Pliomelaena zonogastra (Bezzi)

Tephritis zonogastra Bezzi 1913, Mem. Indian Mus. 3: 164.
Pliomelaena zonogastra (Bezzi) Hardy, 1974, Pac. Ins. Monog. 32: 242.
Collection examined: 1 female, on maize crop, Bangalore, 18.VI.1973. Coll K.D. Ghorpade; 1 male, on wing, Mashobra (Simla), 17.IX.1976. Coll. Ramesh Chander., 1 male, on wing, Taj Garden (Agra), 13.X.1976. Coll. M.L. Agarwal.

Dioxyna sororcula (Wiedemann)

Trypeta sororcula Wiedemann, 1830, Aussereur. Zueifl. Ins. 2: 509.
Dioxyna sororcula (Wiedemann) Frey, 1944, Comm. Biol. Soc. Fenn. 2: 62.
Collection examined: 4 males and 6 females on wing, Solan (Himachal Pradesh) 7.IX.1976.Coll. M.L. Agarwal.

Platensina acrostacta (Wiedemann)

Trypeta acrostacta (Wiedemann), 1824, Anal. Ent. p. 54.
Ensina guttata Macquart, 1843, Mem. Soc. Lille, 1842: 387.
Tephrostola acrostacta (Wiedemann) Bezzi, 1913, Mem. Ind. Mus. 3: 153.
Platensina acrostacta (Wiedemann) Munro, 1938, Rec. Ind. Mus. 40: 36. This is widely distributed in India, Pakistan and Sri Lanka.
Collection examined: 1 male, on maize crop. Bangalore, 18.VI.1973. Coll. K.D. Ghorpade; 2 females, same data, 3.II.1973 ad 13.IV.1973.

Scedella spiloptera (Bezzi)

Tephritis spiloptera Bezzi 1913, Mem. Indian Mus. 3: 165.
Scedella spiloptera Hardy 1973, Pac. Ins. Monog. 31: 322.
Collection examined: 1 male, on wing, Bichpuri, Agra, 15.X.1976. Coll. M.L. Agarwal.

ACKNOWLEDGEMENTS

The authors are grateful to Dr. S.S. Guraya, Prof. & Head, Department of Zoology, Punjab Agricultural University, Ludhiana, India for providing the necessary facilities to work. They are also thankful to the Indian Council of Agricultural Research for financing the scheme under which the work was carried out.